

Serving Multiple Stakeholders: Crafting a “blended” scorecard at the University of Minnesota Health Sciences Libraries

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Abstract

Purpose: Since its introduction in the early 1990s, the Balanced Scorecard has been widely used in the corporate world as a means of assessing overall organizational health. In recent years, the Balanced Scorecard has been successfully adopted by non-profits, including large academic and public library systems. Health sciences and other special libraries also stand to benefit from the use of a Balanced Scorecard. However, they often work under complex organizational structures that involve administrative-level reporting to multiple and diverse stakeholders. As such, the standard four perspectives of the Balanced Scorecard may not serve to adequately tell the library’s story. The Health Sciences Libraries (HSL) at the University of Minnesota has been working to develop and implement a “blended” scorecard that will provide meaningful measures of success for its multiple stakeholders.

Design/Methodology/Approach: In 2006, the HSL formed a Metrics that Matter team that was charged to develop new ways of measuring library activities to express outcomes and impacts in ways meaningful to its funders and constituents. The team’s final report recommended that the HSL use a modified form of the Balanced Scorecard based on Cogdill, et. al.’s *The Value of Library and Information Services in Hospitals and Academic Health Sciences Centers* report to the Medical Library Association. In 2009, the HSL developed a blended scorecard that customized the standard four balanced scorecard perspectives by incorporating language from the strategic goals of the University Libraries and the Academic Health Center, its two major stakeholders.

Findings: The HSL is in the early adoption phase of using their blended scorecard approach to measuring overall organizational health. In January 2009, the language of the blended scorecard was developed, approved by HSL managers, and presented to library personnel. Additional work was done to incorporate annual goals and strategic planning into the matrix and identify relevant measures and targets for each perspective. Pilot testing of the blended scorecard will be continued with the HSL 2010-2011 goal setting. The authors will present the lessons learned through this experience by outlining the steps taken to 1) develop a blended scorecard, 2) seek staff buy-in and organizational support, 3) implement pilot testing, and 4) adjust the blended scorecard based on findings.

Practical Implications/Value: The HSL plans to use the blended scorecard to discover the extent to which its organizational goals have been met. Results will be used internally to set future goals and initiatives and externally to communicate successes and areas for improvement to its primary stakeholders. When used annually, the HSL hopes to have a set of comparison metrics that can be analyzed to determine success over time.

Introduction

The concept of a Balanced Scorecard (BSC) was first introduced in a 1992 Harvard Business Review article by Kaplan and Norton.¹ In this article, the authors noted that managers typically rely on financial and operational measures to assess organizational performance. They also noted that managers often struggle with information overload when trying to decide which measures are critical to organizational success. In response, they crafted the BSC to serve as an evaluation tool that would provide a quick and balanced overview of an organization based on four perspectives: customer, internal, innovation and learning, and financial. For each of these perspectives, a handful of goals and related measures are identified and tracked over time. The result is a simple dashboard representing the overall health of an organization. This information can be used to direct strategic planning initiatives and communicate with stakeholders.

Since its introduction, the BSC has been used widely by for-profit and not-for-profit organizations. It has also seen success within academic and public library systems.² The direct application of the BSC has not yet been tested within health sciences libraries. This may be due to the fact that the BSC, as proposed by Kaplan and Norton, does not account for the complex reporting structures often found within this library environment, nor does it speak the language of the libraries' personnel and primary stakeholders.³ However, the value of having a small set of carefully selected measures that provide a quick, but comprehensive picture of organizational performance holds true within academic health sciences libraries. This presents the challenge of developing and implementing a "blended" scorecard that provides meaningful measures to support organizational improvement while resonating with key individuals in order to tell the library's story.

Background

The Health Sciences Libraries (HSL) at the University of Minnesota serves the six health-related colleges and schools that form the Academic Health Center (AHC). These are the Medical School, the Schools of Nursing, Public Health, and Dentistry, the Colleges of Pharmacy, and Veterinary Medicine and the various research centers associated with these schools. The HSL consists of the Bio-Medical Library, the Veterinary Medical Library and the Wangenstein Historical Library of Biology and Medicine. The HSL director reports to the University Librarian, but also has a faculty appointment and position funding from within the AHC. The patrons that the HSL serves consist largely of graduate level healthcare students, medical residents and fellows, researchers, and the clinical/teaching faculty.

Health sciences libraries have long struggled with devising measures that would prove their value to their parent organizations.⁴ Methods that demonstrate how health sciences libraries affect healthcare outcomes and the organization's bottom line became particularly crucial when the Health Care Financing Administration (HCFA) eliminated the requirement for a hospital-based library in order for health-care institutions to receive Medicare/Medicaid reimbursement in 1986. The Joint Commission on the Accreditation of Health Care Organizations (JCAHO) soon followed by lessening their access to knowledge-based information requirements in the 1994 edition of the JCAHO accreditation manual.

The Medical Library Association, a long-time champion of library value, embarked on two assessment initiatives in 2002 to help member libraries demonstrate their value to their parent organizations. Health sciences libraries benefited from these studies through the creation of the Health Statistics and

Benchmarking Survey for hospital libraries (data collected from hospital libraries 2002-2007, available to participating members) and the study by Keith Cogdill, Eileen Abels and Lisl Zach entitled "The Value of Library and Information Services in Hospitals and Academic Health Sciences Centers."⁵ More recently, cost benefit, return on investment (ROI), and value calculators have been developed or adapted for health sciences libraries to provide administrators with measures such as how the library contributes to the bottom line or how the parent organization benefits for every dollar budgeted for the library (<http://nmlm.gov/mcr/evaluation/calculator.html> and <http://nmlm.gov/mcr/evaluation/roi.html>).

For decades, the HSL has collected library input/output statistics, such as reference transactions and gate counts, to meet the reporting requirements of the Association of Research Libraries (ARL) and the Association of Academic Health Sciences Libraries (AAHSL). The data reporting requirements of the ARL and AAHSL combined with the unique information needs of the HSL, demand time and resources. In any given year, HSL staff members collect information on 222 data points to meet reporting requirements. Of these, 56 data points (25%) must be collected manually and 49 (22%) must be collected on a monthly basis. While some of these measures do give an indication of the overall health of the organization, only 129 (58%) are used for internal management decisions. The remaining 93 (42%) do not impact decision-making within the library. Additionally, the data collected for reporting purposes are developed for use by the library community and do not necessarily translate in a meaningful way to non-library stakeholders such as the AHC. As a result, the HSL must contribute a high level of investment for an arguably small return.

In 2003, the HSL participated in the LibQual survey for the first time with funding received as an AAHSL member library. LibQual provided the first analysis of the library that went beyond the basic input/output data that was historically collected by the HSL, and the results were eye-opening. The survey's findings related to user perception of library services were particularly revealing and led to enhancements in resource availability and physical space. Another direct outcome of the HSL's LibQual participation was the developments of a new goal - to collect, analyze, and present "metrics that matter." The anticipated outcome of this goal was to be able to tell the library's story in a way that is meaningful to the AHC, the HSL's major non-library stakeholder.

The HSL's metrics that matter goal became more urgent due to a series of transforming events within the state and the University. In August 2005, the Minnesota Office of Higher Education provided initial funding for the development of a statewide accountability program for higher education, whose goal was "... to recommend state goals and corresponding indicators for a statewide performance accountability system for Minnesota's higher education sector."⁶ During the same time frame, in June 2005, the University of Minnesota Board of Regents approved the strategic positioning plan, *Advancing the Public Good: A plan for ensuring the University of Minnesota's leadership in education, research and public service in the 21st century* (informally referred to as *Transforming the U*).⁷ This plan had the stated goal for the University to become "one of the top three public research universities in the world." Thirty-four task forces were formed to develop strategies for meeting and implementing the strategic plan. The Metrics and Measurements Task Force was charged with identifying the metrics, measurements, and monitoring processes to assess the progress of the strategic positioning effort as well as appropriate metrics for recommendations of the other task forces. Task force members also participated in the crafting of the statewide accountability program as the University's representatives. In the proposed University-wide performance measures recommended in the Task Force's final report, library quality was listed as an action strategy as part of University resources and infrastructure.⁸ With this increased emphasis on metrics and measures, the University changed its budget model for fiscal year 2006/2007. Previously, libraries were funded as part of the University's common good. In

the new budget model, libraries were no longer considered a common good, but were instead considered part of a cost allocation pool for which each college was assessed based on a complicated set of weighted student and faculty head-counts. This new budget model raised the following question for the colleges: What are they getting for their academic dollars and how are the libraries proving their value or worth, especially during economic turn-downs and budgetary scarcity? The AHC is notably vulnerable to this type of budget model, as it contains the highest number of faculty/researchers and graduate level students, who are weighed heavier than undergraduates. As a result, it was even more important for the HSL to tell its story in a compelling way in order to prove its value to the AHC as a primary stakeholder. This led to the 2006 formation of the HSL's Metrics that Matter Team that was charged with finding ways to measure activities that express outcomes and impacts in that are meaningful to its funders and constituents.

Methodology

To address its charge, the Metrics That Matter Team conducted a preliminary literature review, as well as a survey of the HSL staff to determine the breadth and scope of currently collected data points. The team also brainstormed about what was needed to know about each of the data points, such as the type of data, where it was reported, and how the data was used. A keyword glossary was developed to organize the survey responses and facilitate data manipulation and analysis.

The concept of the BSC was identified and considered at this time. The team looked at the University of Virginia Library's use of the BSC, but concern arose that the typical perspectives and measures of the BSC would not be valuable in telling HSL's story. Measures such as staff retention and expenditures are useful within the University Libraries, but do not resonate within the AHC environment. This led to a team goal of identifying the types of measure or metrics would effectively communicate how the HSL enhances, strengthens, augments, or affects the outcomes that are of most concern to the AHC.

A second, more focused literature review was conducted in late fall 2006. This included an in-depth analysis of AHC Task Force reports related to Clinical Sciences Enterprise (clinical care delivery, education and research),⁹ Knowledge Management Technology (use of electronic technology in education and health service delivery),¹⁰ and Health Professional Workforce (health care and health professional education),¹¹ along with the *Advancing the Public Good: Transforming the U* final report.¹² These reports were mined for any recommendations of measures and metrics that could be tied to HSL services and resources. A preliminary Metrics That Matter report was submitted to the HSL director in March 2007, with a final report submitted in June of that year. The final report contained four major recommendations, of which the first read:

Recommend that the HSL use a modified form of the Balance Scorecard, as outlined by Cogdill, Abels and Zach in the MLA 2002 report *The Value of Library and Information Services in Hospitals and Academic Health Sciences Centers* for the development of the various metrics/measures to promote the value/contributions of the HSL to the Academic Health Center.

The Cogdill study specifically addressed two questions: (1) What is the value of using library and information services to the hospital or academic health sciences center?, and (2) What do institutional administrators consider to be valid measures of the contributions of library and information services?

The report outlined a process that would help meld together the goals of the AHC with the contributions of the HSL. The result would be a modified BSC that would incorporate relevant measures to promote the value of the HSL to the AHC. At the center of the report is the development of taxonomy or a "poly-hierarchical classification" that converts the perspectives of the standard BSC into the following five organizational mission concepts for the health sciences: clinical care, management of operations, education, research and innovation, and service.

Using the suggested taxonomy as a framework, the HSL's management team began implementing the recommendation of the Metrics that Matter Team by drafting a BSC that blended the language of the AHC with the measurable work conducted by the HSL. The management team found that the taxonomy presented in the Cogdill study closely matched the specific language used within the HSL and the AHC. To increase the alignment with the AHC, it was decided that the AHC priorities of education, research, clinical care and service would be used to develop relevant BSC perspectives. These priorities were merged with the standard BSC perspectives to develop the four perspectives of the HSL's "blended" BSC. These include 1) education and learning, 2) research and clinical care, 3) service and outreach, and 4) internal businesses process, learning and growth (Figure 1). This blended BSC framework was formally presented by the HSL director to both the AHC leadership and HSL staff in order to establish their initial support and buy-in. Feedback by way of comments and suggestions was welcomed at this time.

Figure 1: Four perspectives of the HSL's Blended BSC



With the perspectives in place, the seven-step approach outlined in the Abels'et. al.¹³ follow-up to the Cogdill study was initiated in order to create a BSC that reflected the HSL environment. The seven steps include:

1. Select appropriate organizational goals.
2. Link library and information services (LIS) contributions to organizational goals
3. Obtain data on the correspondence between LIS contributions and LIS services
4. Select measures for services
5. Collect and analyze data for selected measures
6. Plan and sustain communication with administrators
7. Evaluate findings and revise selected goals, contributions, and services as necessary

Using this methodology, the HSL organizational goals that were developed through the annual goals setting process were distributed into the four blended BSC perspectives, accounting for steps 1-3 above. While the Abels article suggests selecting a small number of high-level goals during this process, the HSL attempted to distribute all of its annual goals within the blended BSC framework. Once completed, the HSL's management team began the process of selecting a small set of measures for each of the perspectives. To begin this process, the list of existing HSL data collection points created by the Metrics that Matter Team was reviewed. This was done in order to leverage time and other resources by using metrics that were already collected as part of the HSL's existing data collection processes. This work resulted in a list of potential objectives and related measures for each of the blended BSC perspectives. The list was intended to serve as a reference to assist in the selection of a smaller set of relevant measures for final inclusion in the blended BSC.

As the list of possible objectives and measures was being created, an example blended BSC perspective was also developed to serve as a model for use by the HSL's management team. An early draft of the model can be seen in Figure 2, below. Figure 2 shows a mock-up of a hypothetical HSL Financial perspective which was later changed to the Internal Business Processes, Learning and Growth perspective to match the blended BSC framework. This example perspective was organized in table format. It included the primary perspective along with related objectives. Additional columns were added to the table to hold content related to linkages to HSL, AHC and University Library (UL) goals, as well as associated activities, measures, targets, and outcomes for each objective. The result was one cohesive, though admittedly unwieldy, document.

The development of the blended BSC perspectives and the identification of potential measures continued until late 2009. At this point, the HSL's BSC-related work began to overlap with the goal setting activities for 2010. As a result, no final measures were selected and the development of the HSL's blended BSC was placed on hold until the 2010 goals were complete.

Figure 2: Example BSC Perspective

Financial Perspective How well are the library's finances managed to achieve our mission? To succeed financially, how should we appear to our stakeholders?					
Objectives	Linkages	Activities	Measures	Targets	Outcomes
Increase Internal and External Library Funding	HSL 4 UL 7 AHC 2	F (1a): Develop and implement an external funding plan: a. Develop a framework that supports grantsmanship b. Develop a plan that supports fund-raising	Percentage of external funding as portion of total HSL budget	T 1: External funding represents 3% of HSL budget T 2: External funding represents 1% of annual budget	2
			Percentage of monetary donations/endowments as portion of total HSL budget	T 1: Monetary donations and endowments account for 3% of HSL budget T 2: Monetary donations and endowments account for 1% of HSL budgets	1
			Annual increase of development receipts that are unrestricted or minimally restricted	T 1: Unrestricted or minimally restricted receipts increases by 10% annually T 2: Unrestricted or minimally restricted receipts increase by 5% annually	1
		F (1b): Enhance existing internal funding sources (Corporate Services (InfoNow)) a. Develop a marketing plan to engage new and returning customers	Percent annual increase in InfoNOW revenue	T 1: InfoNOW achieves a 4% annual increase in revenue T 2: InfoNOW achieves a 2% increase in revenue	2
			Percent annual increase in new and returning InfoNOW customers	T 1: New and returning customers will increase by 5% annually T 2: New and returning customers will increase by 3% annually	X
Provide resources and services that have a high value to cost ratio	HSL 4 UL 7 AHC 7	F (2a): Adjust collection policies to highlight high use items	Unit cost of electronic serials	T 1: No annual increase in cost/use T 2: Less than 5% increase in cost/use	1
		F (2b): Identify process improvements to maintain or decrease cost of Interlibrary loan	Unit cost of Interlibrary Loan transactions	T 1: Annual percent change in unit cost will be equal to or less than the annual percent change in overall library operating expenditures T 2: Annual percent change in unit cost will be within 5% of the annual percent change in overall library operating expenditures	2
Maintain sufficient levels of investment to remain a top-flight academic health sciences library	HSL 4 UL 7 AHC 2	F (3a): Prepare annual budget requests to align with requirements for maintaining national rankings a. Identify key metrics that influence AAHSL rankings	Library expenditures as a portion of UL expenditures.	T 1: HSL budget will account for at least 5% of UL's expenditures T 2: HSL budget will account for at least 3% of UL's expenditures	1
			AAHSL Rankings	T 1: HSL will rank in the top 5 libraries included in the AAHSL index T 2: HSL will rank in the top 10 libraries included in the AAHSL index	2

Findings

The final recommendations of the Metrics that Matter team has helped the HSL better tell its story to its primary stakeholders. The work to implement the blended BSC as part of the recommended actions is slow, but constant. The HSL leadership supports the blended BSC in concept and its implementation continues to be represented in the HSL annual goals. After the initial presentation and subsequent approval of the blended BSC framework by HSL staff and stakeholders in 2009, no measures or targets were identified for the four perspectives of the blended BSC. As a result, the value of having a small set of carefully selected measures that provide a quick, but comprehensive picture of organizational performance was lost, as was the benefit of directing strategic planning initiatives and supporting communication with stakeholders. This finding suggests that 1) the blended BSC framework as initially presented was overly complex (Figure 2) and 2) selecting the “right” data points that are both meaningful and measurable is difficult and takes time.

With this in mind, a scaled-down version of the blended BSC has been recommended for piloting in fiscal year 2010/2011. This model breaks the blended BSC from the HSL’s annual goal development, which has proven to be too granular for application to the blended BSC framework. This greatly simplifies the process by allowing for the selection of a small set of high-level measures and targets. These measures and targets will not have to align perfectly with annual goals, but will still serve to tell the HSL’s story. This simplified framework also allows for the creation of a more static document as the measures will not have to change from year to year with changing goals. In addition, this approach provides continuity of measures over time to capture both baseline and comparison data. As a result, the HSL’s strengths and areas for improvement will be clearer and easier to communicate as part of the libraries’ story.

Conclusion

The development of a meaningful and systematic approach to measuring organizational success is difficult in any context. This is particularly true within Health Sciences Libraries and other libraries that must be accountable to multiple stakeholders. For the HSL, there is a new urgency to articulate value in response to the University’s cost allocation approach to funding the library’s budget. The blended BSC shows promise in meeting this need, though it is still in the early stages of development and implementation. There have been some challenges and many lessons learned through this process, but it is still believed that the anticipated result from this effort is worth the initial investment. The HSL will continue working to develop a blended BSC framework that is both useful and usable. It is anticipated that once a framework is in place, the HSL will be able to use the blended BSC to determine the extent to which the selected high-level objectives have been met. The results will be used internally to set future goals, and externally to communicate successes and areas for improvement. When used annually, baseline and comparison statistics can be collected to see the HSL’s success over time.

Endnotes

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